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## (54) BOX FOR CONTAINING REELS FOR CINEMA FILMS

(71) I, GINO AGOSTINI, of Italian Nationality, of Via G. Sacco 1, — Bologna — Italy, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a box for containing reels for cinema films, comprising a pair of like square half-shells, hinged to each other at one side thereof. At present during transport, cinema films are subject to relatively rapid deterioration in that they are not sufficiently protected against impact, dust or wear.

The object of the invention is to provide a box in which a pair of reels can be housed, and which is of economical cost, as is the equipment necessary for constructing it.

According to the invention there is provided a box for containing reels for cinema films, comprising a pair of like square half-shells hinged to each other at one side thereof, in which centrally on the side of opening of the box each half-shell comprises a handle formation, to the sides of which are provided respectively a hook-like element and a notch formation for engaging the notch formation and hook-like element respectively on the other half-shell, and on the hinging side, opposite the side of opening, each half-shell comprises an external groove extending along part of said hinging side adjacent the free edge thereof, and a rib of hook cross-section facing towards the inside of the half-shell, and extending along another part of said hinging side, said rib and groove being of equal length and disposed at equal distances from the middle of the hinging side so that on coupling the two half-shells, the hook portion of one half-shell engages in the groove of the other half-shell and vice versa.

Further particulars of the present invention will be more evident from the detailed description given hereinafter of one embodiment, illustrated by way of example in the accompanying drawing in which:

Fig. 1 is a perspective view of a box according to the invention in the closed state;

Fig. 2 is a perspective view of one of the two half-shells constituting the box, with a winding reel for a cinema film inside;

Fig. 3 is a section on a plane perpendicular to that of the hinging side, passing through the centering pins.

With reference to the drawings, the box is indicated overall by the reference numeral 1. It is composed of a pair of half-shells 2, 3 identical one with the other, each of which is of square shape, generally flat and with its corners rounded. The depth of each half-shell is at least equal to the thickness of one reel. As shown in Fig. 2, each half-shell comprises on its side of opening a hollow protuberance 4, closed in the form of a loop, which forms a handle 5 with a corresponding formation on the other half-shell.

To the sides of the protuberance 4 of each half-shell and at equal distances from the middle of the opening side of the box 1 are provided a hook element 6, the free end of which is shaped as a pawl, and a notch formation in the form of a ring element 7 of rectangular shape. The hook element 6 is integral with the outer wall of the relative half-shell 2 or 3 and is resilient so that when the half-shells are brought together, each hook element 6 can penetrate into the corresponding ring element 7 and engage in this latter.

On the side opposite the side of opening are provided hinging means which enable the two half-shells to be detached. Said means comprise an outer groove 8 which extends along about one half the length of the side of the box, immediately below its edge. Along the other half of the same side and at the edge is provided a rib 9 which projects from the edge and comprises a hook portion facing the inside of the box.

Inside each half-shell at its corners are also disposed reinforcements, each of which comprises two fins 10, 12 disposed as a T, of which the flange portions of the T, i.e. the fins 10, partially define an octagonal

perimeter seat for housing a reel 11, while the web portions of the T, i.e. the fins 12, disposed in the corners of the box as bisectors, define an enlargement 13 at their point of union with the fins 10 in which are formed holes or pockets 14.

Whereas in one of the half-shells the pockets 14 remain as such, in the pockets of the other half-shell are inserted pins 15 the conical ends of which project externally for a distance less than the depth of the pockets.

From the description it is evident that the hinging of the half-shells is achieved by engaging the rib 9 of one half-shell in the groove of the other and vice versa.

In the closed position the pins 15 penetrate into the opposing pockets 14, guaranteeing perfect centering of the half-shells which remain coupled together by hooking the pawl elements 6 into the corresponding rings 7.

In the practical realisation of the invention the materials used may be chosen at will. Preferably the device of the invention is constructed by moulding plastics materials of non-inflammable or self-extinguishing type.

The fact that the two half-shells, 2, 3, which when coupled together form the box are perfectly alike, means that only one mould is required leading to large economical advantages in preparing the necessary equipment, especially in consideration of the large dimensions of each half-shell.

Advantageously, in order to guarantee a perfect seal, a gasket which prevents penetration of dust or humidity to the inside of the box is disposed on the edge of each half-shell. This gasket may have a U cross-section for mounting over the edges of the half-shells.

#### WHAT I CLAIM IS:—

1. Box for containing reels for cinema films, comprising a pair of like square half-shells hinged to each other at one side thereof, in which centrally on the side of opening of the box each half-shell comprises a handle formation, to the sides of which are provided respectively a hook-like element and a notch formation for engaging the notch formation and hook-like element respectively on the other half-shell, and on the hinging side, opposite the side of opening, each half-shell comprises an external groove extending along part of said hinging side adjacent the free edge thereof, and a rib of hook cross-section facing towards the inside of the half-shell, and extending along another part of said hinging side, said rib and groove being of equal length and disposed at equal distances from the middle of the hinging side so that on coupling the two half-shells, the hook portion of one half-shell engages in the groove of the other half-shell and vice versa.

2. Box as claimed in claim 1, in which each half-shell comprises reinforcements at its corners, each comprising two fins disposed as a T, the flange portion of the T being joined to the perpendicular sides defining one corner of the box, and the web portion of the T forming the bisector of said corner, at the point of union of said fins there being provided a hole for the insertion of a centering pin.

3. A box substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

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COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of  
the Original on a reduced scale

